

A Relation

Concerning the Quick-silver Mines in Friuli; communicated by Dr. Edward Brown; confirming as well the Account formerly given of that subject, in Numb. 2. of these Transactions, as enlarging the same with some Additions.

THE Town of *Idria*, in the County of *Gorizia* and Province of *Friuli*, is seated low, and encompass'd with Hills on all sides. A River of the same name runs by it, which although *Leandro* terms it *superbissimo fiume d'Idria*, yet I found small and shallow at the time when I was there; though upon plentiful Raine it proves sufficient to convey down the Fir-Trees and other Wood required in the building of the Mines, and also for Fuel required in the service of them: And to this end there is an handsome work of Piles made sloaping athwart the River (after the same manner as I observ'd in *Newsol* in upper *Hungary* cross the River *Gran*;) to stop the Trees, which are cut down, and cast into the River above this place.

What is chiefly considerable in this Town, are the *Quick-silver*-Mines, very well known to the Neighbouring parts, and exceeding useful to many at greater distance.

The entrance into these Mines is not high, or upon an Hill, as in many other Mines; but in the Town it self, whereby they are somewhat the more troubled with Water, against which they are provided with many excellent Engines and Devices, as at other deep Mines. The deepest part of the Mine from the entrance, is between 120 and 130 fathoms.

Of the Quick-silver of this Mine they make two sorts: The one they call *Jungfrau*, that is, *Virgin*-Quicksilver; the other, *plain* Quicksilver. *Virgin*-Mercury they call that, which discovers it self without the help of Fire; and is either plainly to be seen in the Ore, or falls down in little drops in the Mine, and sometimes streams out in good quantity; as about seven years agoe it ran out of the Earth at first in a streame as small as a thred, and afterwards as big as a pack-thred, but ceas'd in three or four dayes.

That also is accounted *Virgin*-Quicksilver, which, having no
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need to pass the fire, is separated by water first in a Sive, and afterwards in a long trough, having very small holes at one end. So that there are in a manner two sorts of *Virgin-Mercury*; the one, running out and discovering itself without labour; the other, requiring some way of Extraction and separation, though not so high an one, as by Fire.

Plaine Quicksilver they name that, which is not at first perceived by the Eye, or falls from the Ore, but is forc'd out by Fire. And this they obtaine out of the Ore, or out of the Cinnaber of Mercury, which they digg out of this Mine. The Ore of this Mine is of a dark colour, mix'd with red. But the best is an hard stone; which they commit not presently to the operation of the Fire, but powder it grossly, and work it by the Sive; that so, if any *Virgin-quicksilver* be found in it, it may be separated in this manner, and what doth not pass the Sive, may be separated by Fire in Iron-furnaces; Fifty of them in a Fire.

The *Quicksilver-ore* of this Mine is the richest of all Ores, I have yet seen; for ordinarily it contains in it *halfe* Quicksilver, and in two parts of Ore one part of Quicksilver, and sometimes in 3. parts of Ore, two parts of Quicksilver.

I went into the Mine by the Pitt of St. *Agatha*, and came up again by that of St. *Barbara*, descending and ascending by Ladders. I ascended at one of 639. Itaves or 89. fathoms. *Andreas Siferus*, in *Kircher's Mund Subterraneus*, makes such a dreadful description of this Mine, that it might discourage any from attempting the descent; which makes me doubt, Whether he had been in any other Mine, especially where the descent is made by Ladders.

This Mine, I was inform'd, hath been wrought 200. years, about the same space of time with *Newfol-Mine*, but is much shorter in time of the Silver-mine at *Schemnitz*; and much shorter yet of the notable *Lead-mines* in upper *Carinthia*. Some hundreds of men are employed about this Mine of *Idria*; of which the chief Officers are the Prefect, the Controller, and the Judge.

I heard no complaint of the *Damps* of this Mine, as I have heard of divers others. Yet the workmen are sufficiently mischiev'd without them: for, though they be not suddenly suffocated,
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yet the Mercury getting into their Bodies, they are languishingly destroyed by it. Much less could I hear any news of either noxious or innocent Apparitions, *Virunculi* &c. such as some write, and many talk of in other Mines.

In a Laboratory, where the Quicksilver is separated by Fire, I saw an heap of 16000. Retorts of Iron; every one of which costs a Crown at the best hand from the Iron-furnaces in *Carinthia*. There are 800. Retorts and as many Recipients employ'd together, in drawing over the Quicksilver in 16. Furnaces; 50. in each Furnace, 25. of a side, 12. above, and 13. below of each side.

June 12, when I was there, they carried out 40. *Saumes* of Quicksilver into forrain parts, each *Saume* containing 315. pound weight, to the value of 400 ducats of Gold. Though the conveyance be not easy, yet some is sent as far as *Cremnitz* in *Hungary*, for the use of the Gold-mines; and very much carried away Southward. For, though the River by the Town be but small, yet they are not very far from the *Sontius* or *Lysonzo*, a considerable River, which runs into the Gulf of *Trieste* in the *Adriatick* Sea.

In the Castle I saw 3000 *Saumes* of Quicksilver together, in barrels; the Quicksilver being first made up in double leather: And in another house as much rich Ore, as can be distill'd in 2. years, except they have great plenty of rain to bring down the wood; but, the Hills being high about them, it snows at the tops of them oftner than it rains.

The Countrys, through which I pass'd, are singularly well wooded, and well stor'd with fair Trees, wherein, beside such as grow with us in England, are stately *Firrs*, *Larches*, *Pines*, *Pinasters*, *Picea's*, and that nobly crisped and well grain'd kind of *Acer*, whereof *Viols* and *Violins* are made: Whereof there is also plenty in the Country of *Salzburg* and *Carinthia*.

Travelling sometimes in the night, we had continually about us a great number of large *Glow-worms*, which put into papers gave a dim light like Candles in Lanthorns; and the Aire all full of *flaming Flies*, affording some delight to us.

The way unto this place I found difficult; for, travelling from places on the borders of *Croatia* by *Lovitch*, I was faine to pass over

over great mountains, and coming from it, I pass'd over *Swartzenberg* or the Black mountain, from whence I descended 10. miles in a rocky Country, and farr more stony than the *Crau* or *Campus lapidosus* in *Provence*; and so to *Aidoschini* and *Goritia*, and leaving the *Sclavonian* behind, entred into the *Lingua Ful-lana*, and so on to this Noble and incomparably fortified City; where being yet uncertain, whether I should go to *Venice*, I would not omit to present you this accompt, which I beseech you to accept from &c.

Palma nova in *Friuli* June 15. 1669.

*An Accompt from the same Dr. Brown
Concerning an Un-common Lake, called the Zirchnitzer-See, in
Carniola.*

HAVING cross'd the River *Dravus*, and pass'd Mount *Lui-bel* in the *Carnick Alpes*, by that noble passage, cut through the Rooks, and vaulted like that of *Pausilype* near *Naples*, I had a desire to take a view of the Lake of *Zirchnitz*, so much spoken of, and written on by so few; and therefore I went unto *Crainburg* upon the River *Savus*, and so to *Labach*, the chief City of *Carniola*; from whence I continued my Journey in *Carniola* betwixt the Hills and a great Marsh, till I came to *Brounizza*, two leagues from whence and beyond the Hills is seated the said Lake, receiving that name from *Zirchnitz*, a town of about 300. houses.

This Lake is near two German Miles long, and one broad. On the South-side thereof lyes a great Forrest, wherein are many Deer, and wild Boares, Wolves and Bears. On the North side the Country is flat; but the whole Valley is encompassed with Hills, at some distance from it.

This Lake is well fill'd with Water for the greatest part of the Year; but in the Month of *June* it sinketh under ground, not only by percolation or falling through the pores of the Earth, but retireth under ground, through many great holes at the bottom of it: And in the Month of *September* it returns by the same, and so in a very short time fills up the Valley again.

As the time of the waters Descent is short, especially when